

1 LISTING OF ALL CLAIMS, AS AMENDED

2 Summary: Claims 1 - 9 and 11 - 37 are original claims. Claim 10
3 is currently amended herein. Claim 38 is new herein.

4 CLAIMS

5 I claim:

6
7 Claim 1 (original): A conduit for a fluid,
8 for placement in a mouth of a user, such user's mouth having
9 lips; an inner cheek wall; dental arches; rear-most teeth with a
10 cheek side, a dorsal side, and a rear corner there between; a
11 rear-jaw gap; and a rear-mouth cavity,
12 said conduit comprising:

- 13 - a first open end and a second open end,
14 - a conduit wall forming an open passageway between said first
15 and second open ends, enabling passage of a fluid through said
16 conduit,
17 -said conduit having a longitudinal axis and having the following
18 connected portions disposed along said longitudinal axis between
19 said first and second open ends:
20 --a first conduit portion adapted to dispose said first open end
21 in a position outside a user's lips;
22 --a second conduit portion adapted to be disposed between a
23 user's lips;
24 --a third conduit portion adapted to be disposed along a user's
25 inner cheek wall outside a user's dental arches;
26 --a fourth conduit portion adapted to curve around a rear corner
27 of at least one of a user's rear-most teeth from cheek side to
28 dorsal side thereof; and
29 --a fifth conduit portion adapted to be disposed in a user's
30 rear-jaw gap and connected to said second open end,
31 thereby enabling a user to draw or expel a fluid through said
32 conduit between a user's rear-jaw gap and a position outside a
33 user's lips.

34
35 Claim 2 (original): The conduit of claim 1 further comprising:
36 said conduit has a sixth conduit portion

1 -connected between said fifth conduit portion and said second
2 open end, and
3 -adapted to extend said conduit from a user's rear-jaw gap to
4 dispose said second open end within a user's rear-mouth cavity,
5 whereby said conduit forms a continuous passageway enabling a
6 user to draw or expel fluid between a user's rear-mouth cavity
7 and a position outside of a user's lips.
8

9 Claim 3 (original): The conduit of claim 1 wherein at least one
10 of said fourth and fifth conduit portions is flexible.
11

12 Claim 4 (original): The conduit of claim 2 wherein at least one
13 of said fourth, fifth and sixth conduit portions is flexible.
14

15 Claim 5 (original). The conduit of claim 1, for positioning
16 adjacent to a user's mouth tissues along a user's cheek pathway,
17 wherein

18 - at least one of said fourth and fifth conduit portions is
19 adapted to flex under pressure from a user's adjacent mouth
20 tissues so as to conform approximately to such user's adjacent
21 mouth tissues, and
22 - at least said third conduit portion is sufficiently rigid along
23 said longitudinal axis of said conduit to substantially resist
24 bending under pressure from a user's adjacent mouth tissues,
25 whereby structural interaction between said flexible portion(s),
26 in conforming to a user's mouth tissues, and said rigid
27 portion(s), in resisting bending pressure from a user's mouth
28 tissues, tends to stabilize positioning of said conduit in a
29 user's cheek pathway.
30

31 Claim 6 (original). The conduit of claim 2, for positioning
32 adjacent to a user's mouth tissues along a user's cheek pathway,
33 wherein

34 - at least one of said fourth, fifth and sixth conduit portions
35 is adapted to flex under pressure from a user's adjacent mouth
36 tissues along a user's cheek pathway so as to conform

1 approximately to such user's adjacent mouth tissues, and
2 - at least said third conduit portion is sufficiently rigid along
3 said longitudinal axis of said conduit to substantially resist
4 bending under pressure from a user's adjacent mouth tissues in a
5 user's cheek pathway,
6 whereby structural interaction between said flexible portion(s),
7 in conforming to a user's mouth tissues, and said rigid
8 portion(s), in resisting bending pressure from a user's mouth
9 tissues, tends to stabilize positioning of said conduit in a
10 user's cheek pathway.

11
12 Claim 7 (original): The conduit of claim 1, for placement in a
13 user's mouth at least partially within a user's cheek pouch,
14 further comprising:
15 a spring element, configured for placement in a user's cheek
16 pouch, is joined to said conduit,
17 whereby positioning of said conduit in a user's mouth is
18 stabilized.

19
20 Claim 8 (original): The conduit of claim 1 wherein the spring
21 element includes a resilient filament joined transversely to said
22 third conduit portion.

23
24 Claim 9 (original). The conduit of claim 7 comprising:
25 -said conduit has one or more lacing holes in one or both of said
26 third and fourth conduit portions, and
27 -said spring element is formed of a resilient filament, and
28 -said resilient filament is joined to said conduit by lacing said
29 filament through said lacing holes.

30
31 Claim 10 (Currently amended): The conduit of claim 1,
32 improved to enable said conduit to more nearly conform to tissues
33 of a user's mouth,
34 comprising:

35 - said conduit wall and said open passageway form a radial
36 conduit cross-section transverse to said longitudinal axis,

1 and
2 -said conduit has a plurality of connected parts along said
3 longitudinal axis, at least one of which connected parts
4 ~~which~~ is flexible about said radial conduit cross-section,
5 thereby enabling adjustment of said radial conduit cross-section
6 to more nearly conform to tissues of a user's mouth without
7 collapse of said open passageway.

8
9 Claim 11 (original): The conduit of claim 1, improved to enable
10 said conduit to more nearly conform to tissues of a user's mouth,
11 comprising:

12 -- said conduit wall and said open passageway form a radial
13 conduit cross-section transverse to said longitudinal axis, and
14 -said conduit has a plurality of connected parts along said
15 longitudinal axis, at least one of which connected parts which is
16 resilient about said radial conduit cross-section,
17 thereby enabling adjustment of said radial conduit cross-section
18 to more nearly conform to tissues of a user's mouth without
19 collapse of said open passageway.

20
21
22 Claim 12 (original): The conduit of claim 1 wherein said first
23 open end of said conduit includes a plurality of openings through
24 each of which openings a fluid can pass into and out of said
25 conduit passageway independently of other openings in said first
26 open end.

27
28 Claim 13 (original):

29 The conduit of claim 1, further comprising:
30 said second open end of said conduit includes a plurality of
31 openings through each of which openings a fluid can pass into and
32 out of said conduit passageway independently of other openings in
33 said second open end.

34
35 Claim 14 (original): A conduit of claim 1 further comprising:
36 said second conduit portion is adapted to permit a user's lips to

1 close and nearly seal about said second conduit portion.

2
3 Claim 15 (original): A conduit of claim 1 further comprising:
4 at least one retainer element is connected to said first or
5 second conduit portions and adapted to be disposed about a user's
6 lips.

7
8 Claim 16 (original): A dual conduit,
9 for placement along dual cheek pathways located on opposing sides
10 of a user's mouth relative to a user's rear-mouth cavity, rear-
11 jaw spaces, rear-most teeth, dental arches, inner cheek walls,
12 lips, and positions exterior to a user's mouth,
13 comprising:

14 A conduit:

15 - having a rear-mouth-cavity portion

16 -- adapted to be disposed across a user's rear-mouth cavity,
17 and

18 -- having a rear-mouth flow opening disposed to allow fluid
19 to flow between said conduit and a user's rear-mouth cavity;
20 and

21 -- having two opposing rear-mouth ends; and

22 - having two opposing cheek-path portions

23 -- oppositely connected to said two opposing rear-mouth ends
24 of said rear-mouth cavity portion, and

25 -- adapted to oppositely traverse along opposing sides of a
26 user's mouth, through a user's opposing rear-jaw spaces
27 dorsally of a user's rear-most teeth, outside a user's
28 dental arches along inner walls of a user's opposing cheeks,
29 and between a user's lips, and

30 -- each of said two opposing cheek-path portions is adapted
31 to dispose an open end outside a user's mouth to allow fluid
32 to flow between said conduit and a position outside of a
33 user's mouth;

34 whereby said conduit forms dual passageways located on opposing
35 sides of a user's mouth for fluid flow between a user's rear-
36 mouth cavity and positions exterior to such user's mouth.

1 Claim 17 (original): A conduit of claim 1, further comprising:
2 an ear piece connected to said first conduit portion and adapted
3 to anchor said conduit about a user's ear.

4
5 Claim 18 (original): A dual conduit of claim 16, further
6 comprising: ear pieces connected to the two opposing cheek-path
7 sections of said conduit and adapted to anchor said conduit about
8 a user's ears.

9
10 Claim 19 (original): A conduit,
11 for passage of a fluid along a user's cheek pathway, from a
12 position outside a user's lips, along a user's inner cheek wall,
13 from the cheek-adjacent side to the dorsal side of at least one
14 of a user's rear-most teeth, and through a user's rear-jaw gap,
15 comprising:

16 First conduit means for providing an open passageway between
17 a position outside a user's lips and the cheek-adjacent side of
18 at least one of user's rear-most teeth, and

19 Second conduit means, connected to said first conduit means,
20 for providing a continuing open passageway dorsally of at least
21 one of a user's rear-most teeth and through a user's rear-jaw
22 gap,

23 whereby said first and second conduit means form a continuous
24 passageway for fluids between a position outside a user's lips
25 and a user's rear-jaw gap.

26
27 Claim 20 (original): A conduit of claim 19,
28 for providing a continuous passageway between a position outside
29 a user's mouth and a user's rear-mouth cavity,
30 further comprising:

31 Third conduit means, connected to said second conduit means,
32 for providing a open passageway between a user's rear-jaw gap and
33 a user's rear-mouth cavity,
34 whereby said first, second and third conduit means combine to
35 provide a continuous open passageway between a user's rear-mouth
36 cavity and a position outside a user's mouth.

1 Claim 21 (original). A dual conduit, for placement along both of
2 a user's opposing first and second cheek pathways, comprising,
3 a first conduit of claim 19, for positioning along a user's first
4 cheek pathway, and
5 a second conduit of claim 19 for positioning along a user's
6 second cheek pathway, and
7 rear-mouth cavity conduit means, for spanning across a user's
8 rear-mouth cavity to connect said first conduit of claim 19 and
9 said second conduit of claim 19,
10 whereby dual passageways for a fluid are formed, along a user's
11 first and second cheek pathways, between a user's rear-mouth
12 cavity and positions outside a user's mouth.

13
14 Claim 22 (original). The conduit of claim 1, for positioning in
15 a user's mouth when a dental device also is emplaced in a user's
16 mouth, further comprising:
17 said conduit of claim 1 is configured to be positioned in a
18 user's cheek pathway disposed about a dental device that is
19 engaging at least one of a user's maxillary teeth, mandibular
20 teeth, and palate.

21
22 Claim 23 (original): A combination airway and dental device,
23 for simultaneously supplementing a user's nasal airway and
24 mitigating a user's throat airway restrictions, comprising:
25 the conduit of claim 22, combined with a dental device which is
26 adapted to urge a user's mandible ventrally relative to a user's
27 maxilla.

28
29 Claim 24 (original): The conduit of claim 1, for positioning in
30 a user's mouth when a tongue-control device also is emplaced in
31 such user's mouth to restrict a user's tongue from sagging into a
32 user's throat airway, further comprising:
33 said conduit of claim 1 is configured to be positioned in a
34 user's cheek pathway disposed about a tongue-control device which
35 is adapted to restrict a user's tongue from sagging into a user's
36 throat airway .

1 Claim 25 (original): A combination airway and tongue-control
2 device, for simultaneously supplementing a user's nasal airway
3 and a mitigating a user's throat airway restrictions, comprising:
4 the conduit of claim 24 is combined with a tongue-control device
5 which is adapted to restrain a user's tongue from sagging into a
6 user's throat whereby said conduit and said tongue-control device
7 operate cooperatively in a user's mouth.

8
9 Claim 26 (original): A method of manufacturing a conduit of
10 claim 1, for in-line manufacturing enabling post-manufacturing
11 adjustment to fit a user's cheek pathway, comprising the
12 following steps:

13 Selecting a metal or plastic material,
14 Forming said material into a conduit in an in-line configuration
15 and during said forming including flexible portions within said
16 in-line configuration adapting said conduit to be flexed after
17 its formation into a configuration which will fit along a user's
18 cheek pathway.

19
20 Claim 27 (original): A conduit of claim 1 wherein an opening or
21 hole is formed in said conduit wall by the following method:

22 Forming said opening in said conduit wall by localized
23 application of heat.

24
25 Claim 28 (original): A conduit of claim 27 wherein said opening
26 is formed in said conduit wall, said method of forming said
27 opening further comprising:

28 Localized application of heat by at least one of the following:

29 Contacting said conduit wall with a heated instrument

30 Contacting said conduit wall with a flame

31 Focusing laser energy on said conduit wall.

32
33 Claim 29 (original): The conduit of claim 1 wherein at least one
34 of said fourth and fifth conduit portions is rendered flexible by
35 corrugations formed in the conduit wall of said conduit
36 portion(s).

1 Claim 30 (original): The conduit of claim 2 wherein at least one
2 of said fourth, fifth and sixth conduit portions is rendered
3 flexible by corrugations formed in the conduit wall of said
4 conduit portion(s).

5
6 Claim 31 (original): A self-stabilizing cheek path airway, for
7 positioning in a user's mouth, at least partially in a user's
8 cheek pouch, comprising:

9 conduit means for providing a passageway for a fluid
10 traversing at least partially through a user's cheek pouch, and
11 cheek pouch anchor means, joined to said conduit means, for
12 stabilizing said conduit means in a user's mouth.

13
14 Claim 32 (original): The self-stabilizing cheek path airway of
15 claim 31 wherein said cheek pouch anchor means further comprises:
16 a resilient filament

17 - which is configured into a plurality of connected loops, each
18 loop having a loop span size, and
19 -said plurality of loops are combined to form a whole spring
20 element with a whole spring element span size, and
21 - each one of said plurality of loop span sizes is mutually
22 adjustable relative to at least one other of said loop span
23 sizes, such that an increase or decrease in the loop span size of
24 any one of said plurality of loops results in a converse decrease
25 or increase in the loop span size of at least one other of said
26 plurality of loops,
27 thereby enabling adjustment of said whole spring element span
28 size by said mutual adjustment within said plurality of loop span
29 sizes.

30
31 Claim 33 (original): A cheek pouch anchor,
32 for placement within a user's cheek pouch to maintain positioning
33 of a work piece in a user's mouth while a user's jaws, inter
34 occlusal space, and lips open and close,
35 comprising:
36 A spring element

1 adapted

- 2 - to be placed within a user's cheek pouch, and
 - 3 - to compress as a user's jaws close, and
 - 4 - to resiliently expand so as to form and maintain a span
 - 5 bridging across a user's inter occlusal space and a user's
 - 6 lip opening formed as a user's jaws and lips open and close,
 - 7 and
 - 8 - to receive joinder to a work piece, and
- 9 having structural strength sufficient, when joined to a work
- 10 piece, to maintain placement within a user's cheek pouch while a
- 11 user's lips and jaws open and close.

12

13 Claim 34 (original): The cheek pouch anchor of claim 33 wherein

14 said spring element is formed of at least one of the following:

- 15 metal,
- 16 plastic,
- 17 resilient monofilament plastic line.

18

19 Claim 35 (original): The cheek pouch anchor of claim 33 further

20 comprising:

21 said cheek pouch anchor is joined with a conduit for a fluid,

22 which conduit is adapted for placement at least partially in a

23 user's cheek pouch.

24

25 Claim 36 (original): The cheek pouch anchor of claim 33 wherein

26 said spring element comprises:

- 27 a resilient filament
- 28 - which is configured into a plurality of connected loops, each
- 29 loop having a loop span size, and
- 30 -said plurality of loops are combined to form a whole spring
- 31 element with a whole spring element span size, and
- 32 - each one of said plurality of loop span sizes is mutually
- 33 adjustable relative to at least one other of said loop span
- 34 sizes, such that an increase or decrease in the loop span size of
- 35 any one of said plurality of loops results in a converse decrease
- 36 or increase in the loop span size of at least one other of said

1 plurality of loops,
2 thereby enabling adjustment of said whole spring element span
3 size by said mutual adjustment within said plurality of loop span
4 sizes.

5
6 Claim 37 (original): The cheek pouch anchor of claim 33,
7 improved to dispense a substance within a user's mouth, wherein
8 said spring element is adapted to receive impregnation or coating
9 with a substance which is to be released in a user's mouth.

10
11 Claim 38 (new): A cheek pouch anchor, for placement within a
12 user's cheek pouch, comprising:

13 A spring element adapted

- 14 - to be placed within a user's cheek pouch, and
- 15 - to compress as a user's jaws close, and
- 16 - to resiliently expand so as to form and maintain a span
- 17 --- bridging across such user's inter occlusal space as
- 18 such user's jaws open, and
- 19 --- bridging across such user's lip opening formed as
- 20 such user's lips open, and
- 21 - to receive impregnation or coating with a substance which
- 22 is to be released within such user's mouth,

23 whereby said spring element is enabled to maintain its placement
24 within a user's cheek pouch and to release such substance while
25 such user's lips and jaws remain free to open and close.